

VIRGINIA DEPARTMENT OF EDUCATION

SPEECH-LANGUAGE SEVERITY RATING SCALES

Severity rating scales are valuable tools for describing the child's speech-language impairment, communicating with eligibility and IEP team members, and assuring consistency among speech-language pathologists in the division. The presence of a severity rating on any of the four scales does not guarantee eligibility; rather, it describes the results of the speech-language assessment in consistent terms. The eligibility committee will consider the severity rating, in conjunction with other information, as it determines eligibility. Eligibility is based on (1) the presence of a speech-language impairment, (2) that has an adverse educational impact, and (3) that results in the need for special education (specialized instruction) and related services (services required for the student to benefit from special education). See the eligibility section of these guidelines for further information on eligibility.

Further, a particular severity rating does not specify or predict a certain level of service. The level of service is determined by the goals, objectives/benchmarks specified by the IEP team. See the IEP section of this manual for further information on IEP development and decision-making.

After indicating the severity rating in the columns, compare the rating score to the functional narrative. If the rating and overview do not match, consider the data used and select the functional narrative that best describes the student.

When completing ratings in multiple areas, complete all pages. Individual ratings are reviewed and functional narratives are selected to describe performance for each area. Service recommendations are based on the area with the most severe rating. Do not add or average separate rating scales to determine severity.

SEVERITY RATING SUMMARY SHEET

Name	DOB
Date Completed	_Speech-Language Pathologist
Record points assigned for each	ch factor considered in each area.

AREAS	F	FACTORS C				
	A	В	С	D	TOTAL POINTS	OVERALL FUNCTIONAL LEVEL
Articulation						
Language						
Voice						
Fluency						

Do not add or average separate rating scales to determine severity. See individual severity rating scales for full description of factors considered and overall functional levels.

	Overall Functional Le	vel
Level 0	0-3 points	No apparent problem
Level 1 Level 2	4-6 points 7-9 points	Mild Moderate
Level 3	10-12 points	Severe

The presence of a severity rating on any of the four scales <u>does not guarantee eligibility</u>; rather, it describes the results of the speech-language assessment in consistent terms. The eligibility committee may consider the severity rating, in conjunction with other information, as it determines eligibility.

Eligibility is based on (1) the presence of a speech-language impairment,

- (2) that has an adverse educational impact, and
- (3) that results in the need for special education (specialized instruction) and related services (services to benefit from special education).

A particular severity rating does not specify or predict a certain level of service.

ARTICULATION SEVERITY RATING SCALE

An articulation/phonological impairment is characterized by a failure to use speech sounds that are appropriate for a person's age and linguistic dialect. Such errors in sound productions may interfere with intelligibility, social communication, and/or academic and vocational achievement.

Students cannot be considered to have an articulation/phonological impairment based on characteristics that are consistent with cultural and/or linguistic diversity. Students who use American Sign Language or other alternate forms of communication (e.g., augmentative/alternative communication) should be assessed in their primary mode of communication.

Children who evidence problems with hearing, structure and function of the speech mechanism (e.g., cleft palate), or motor speech difficulty (e.g., apraxia) should be viewed differently than those with more common developmental speech sound disorders. The presence of such etiological variables would suggest a high priority for intervention. After intervention, when the child has reached a plateau in his/her motor skills and has mastered compensatory strategies, the child may not require services.

This rating scale represents the most current research in the area of articulation and phonology at the time of printing (2005).

The presence of an articulation/phonological impairment does not guarantee the child's eligibility for special education.

Evaluation Data¹

The following measures are appropriate for use in determining the presence of an articulation/phonological impairment:

speech sample
contextual probe
structured observation
classroom work
other curriculum/academic results
standardized test(s)
teacher report, interview, or checklist
child report, interview, or checklist
parent report, interview, or checklist

NOTE: Teacher, child, and parent reports, interviews, or checklists are not sufficient evidence by themselves and must be supported with additional data.

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¹ Adapted from Connecticut State Department of Education. (1999). <u>Guidelines for Speech and Language Programs</u>. Vol. II: <u>Determining Eligibility for Special Education Speech and Language Services</u>.

Overall Functional Level

The speech-language pathologist should complete the attached rating scale first, adding the points assigned to each factor. Then the total points should be applied to the Articulation Rating Scale Overall Functional Level to determine an overall severity rating.

Articulation/Phonological Measures

The severity scale uses the following measures. Some measures may be more important than others at certain ages. The following guidelines may be helpful:

Children 3-5 years of age: Intelligibility, severity, process usage, and stimulability are most important.

Children 6-9 years of age: Children in this age range are typically those for whom speech sound production norms and stimulability will have greatest significance. In addition, social and academic variables should be given stronger consideration.

Children above the age of 9 years: Children in this age range are those for whom social and academic/vocational considerations are of high importance.

Intelligibility

Select 100 consecutive words from contextual speech. Determine the percentage of words understood based on a tape-recorded sample (Weiss, 1980).

Speech sound (segmental) production:

This factor should be rated if the *Phonological Patterns* factor is not used. Determine developmental appropriateness by using the Iowa-Nebraska (I-N) norms (Smit, *et al*, 1990). These norms were originally published in a *Journal of Speech and Hearing Disorders* article and reflect the most recent and comprehensive normative study that has been reported. While results are comparable to those of Templin (1957), the I-N norms represent a larger normative sample. Sanders' (1972) report of normative data does not reflect data that is original to him, but rather represent a reinterpretation (albeit useful) or Templin's normative data.

Using norms to determine if therapy is warranted is not best practice, for students producing lateralized sibilants, because self correction does not usually occur with lateralization of sibilants. There is literature to support not using developmental norms to determine when to provide therapy for lateral /s/.

The literature also supports provision of therapy for developmental errors /r/ and /s/ at or around age 8. There is no support for the idea that error production become more resistant to correction and should be treated at an younger age.

Stimulability

Data suggests that lack of stimulability for a misarticulated sound is a good indicator of an appropriate target for therapy, since ability to produce a sound is essential before children begin to acquire a sound or otherwise generalize from one context to another. Determine stimulability using the Miccio Probe (Miccio, A.W., 2002). Stimulability is determined for all error sounds, regardless of age appropriateness.

Use of the Miccio Probe is best described in Miccio's article in the American Journal of Speech-Language pathology. "To facilitate quick administration of a stimulability probe, only sounds absent from the inventory are tested. The student is asked to imitate these specific consonants in isolation or nonsense syllables. Those sounds imitated correctly some of the time (at least 30% of possible opportunities) are presumed to be stimulable." If multiple sounds are absent from the inventory, the probe may be shortened by administering only one vowel context during the initial assessment. In the complete probe, a child has 10 opportunities to produce a sound: in isolation and in three word positions in three vowel contexts, [i], [u], and [a]. The corner vowel contexts: a high (or close) unround front vowel, a high round back vowel, and a low unround vowel usually reveal any consonant-vowel dependencies. If time does not permit the completion of the probe, stimulability is tested in isolation and with the vowel [a], for example, [sa], [asa], [asa]"

Percentage of Consonants Correct

The procedures below are based on the recommendations of Shriberg and Kwiatkowski (1982), but are abbreviated for purposes of simplicity.

- 1. Obtain a tape-recorded connected speech sample that will include 90 different words usually a sample of around 225 total words is sufficient. If the child is so unintelligible that it is impossible to identify this number of different words, then a single word assessment tool can be used to gather a corpus of single word productions for analysis.
- 2. Only consonants are scored, not vowels (i.e., only the consonantal /r/ is scored).
- 3. Score only the first production of a consonant if a syllable is repeated (e.g., ba-balloon. Score only the first production of /b/).
- 4. Do not score consonants if a word is unintelligible or only partially intelligible.
- 5. Errors include substitutions, deletions, distortions, and additions. Voicing errors are only scored for consonants in the initial position of words.
- 6. If /ng/ is replaced with /n/ at the end of a word, do not score it as an error. Likewise, minor sound changes due to informal speech and/or selection of sounds in unstressed syllables are not scored as errors (e.g.,/fider/ for "feed her," /dono/ for "don't know").
- 7. Dialectal variations are not scored as errors.
- 8. To determine the PCC value use the following formula:

Number of Correct Consonants			
	X	100	= PCC
Total Number of Consonants			

² Clinical Problem Solving: Assessment of Phonological Disorders. **Volume 11, Issue 3. Pages 221 - 229. August 2002**

${\bf Iowa - Nebraska \ Articulation \ Norms}^3$

Listed below are the recommended ages of acquisition for phonemes and clusters, based generally on the age at which 90% of the children correctly produced the sound.

Phoneme	Age of Acquisition (Females)	Age of Acquisition (Males)
/m/	3;0	3;0
/n/	3;6	3;0
/ŋ/	7;0	7;0
/h-/	3;0	3;0
/w-/	3;0	3;0
/j-/	4;0	5;0
/p/	3;0	3;0
/b/	3;0	3;0
/t/	4;0	3;6
/d/	3;0	3;6
/k/	3;6	3;6
/g/	3;6	4;0
/f-/	3;6	3;6
/-f/	5;6	5;6
/v/	5;6	5;6
/θ/	6;0	8;0
/ð/	4;6	7;0
/s/	7;0	7;0
/ z /	7;0	7;0
/ʃ/	6;0	7;0
/t∫/	6;0	7;0
/dʒ/	6;0	7;0
/1-/	5;0	6;0
/-1/	6;0	7;0
/r-	8;0	8;0
/ o /	8;0	8;0

Word- Initial Clusters	Age of Acquisition (Females)	Age of Acquisition (Males)
/tw kw/	4;0	5;6
/sp st sk/	7;0	7;0
/sm sn/	7;0	7;0
/sw/	7;0	7;0
/sl/	7;0	7;0
/pl bl kl gl fl/	5;6	6;0
/pr br tr dr kr gr fr/	8;0	8;0
/Or/	9;0	9;0
/skw/	7;0	7;0
/spl/	7;0	7;0
/spr str skr/	9;0	9;0

Note regarding phoneme positions:

/m/ refers to prevocalic and postvocalic positions

/h-/ refers to prevocalic positions

/-f/ refers to postvocalic positions

³ Smit, Hand, Freilinger, Bernthal, and Bird (1990). *Journal of Speech and Hearing Disorders*, 55, 779-798.

Miccio Stimulability Probe

Name:											
Transcriber:											
Date:											
Prompt:	"Look at n	ne, liste	en, ana	l say w	hat I sa	ay. "					
Sound	Isolation	i	i_i	i	<u>_</u> a	a_a	a_	u	u_u	u_	% Correct
p											
b											
t											
d											
k											
g											
θ											
ð											
f											
V											
S											
Z											
ſ											
3											
t∫											
dz											
m											
n											
ŋ											
W											
j											
h											
1											
r											

PERCENTAGE CONSONANTS CORRECT (PCC)

Child	Date of Birth	
PCC Scoring Date	Speech-Language Pathologist	

Consonant Class	Consonant Sound	Initial	Medial	Final	Number of Consonants Correct	Total No. Consonants
	/m/					
Nasal	/n/					
	/ŋ /					
Glides	/w/					
Glues	/j/					
	/p/					
	/b/					
Stops	/t/					
Stops	/d/					
	/k/					
	/g/					
	/f/					
	/v/					
	/∫/					
	/3/					
E/	/s/					
Fricatives/ Affricates	/ z /					
	/j/					
	/0/					
	/ð/					
	/dʒ /					
	/h/					
Liquids	/1/					
	/r/					
				TOTALS		

# of Consonants Correct	_	PCC
Total # of Consonants		- 00

ARTICULATION RATING SCALE OVERALL FUNCTIONAL LEVEL

Level 0 (0 – 3 points) No apparent problem	The student's connected speech during educational activities is consistently understood and not distracting to the listener. Student's verbal participation in educational activities is rarely limited by self-consciousness or listener reaction.
Level 1 (4 – 6 points) Mild	The ability to understand the student's connected speech in educational activities may be affected by listener familiarity and/or knowledge of the context. The student's articulation is occasionally distracting to the listener. The student's verbal participation in educational activities may occasionally be limited by self-consciousness about listener reactions to his/her speech.
Level 2 (7 – 9 points) Moderate	The student's connected speech in educational activities requires context cues to be understood. The student's articulation is usually distracting to the listener. The student is aware of errors. The student's verbal participation in educational activities may frequently be limited by self-consciousness about listener reactions to his/her speech.
Level 3 (10 - 12 points) Severe	The student's connected speech in educational activities is rarely understood in known context. The student may or may not be aware of errors and is rarely stimulable for correct production. The student's verbal participation in educational activities is usually limited by self-consciousness about listener reactions to his/her speech.

ARTICULATION SEVERITY RATING SCALE

	Factors	No Apparent Problem (0 pts)	Mild (1 pt)	Moderate (2 pts)	Severe (3 pts)	Points Assigned
A	Intelligibility (connected speech)	Age 3: 75% or > Age 4: 85% or > Age 5 and up: 90% or >	Age 3: 65–75% Age 4: 75 – 85% Age 5 and up: 80 – 90%	Age 3: 50 – 65% Age 4: 65 – 75% Age 5 and up: 70 – 80%	Age 3: <50% Age 4: <65% Age 5: <70%	
В	1. Speech sounds (segmental productions)	Meets Iowa- Nebraska (I-N) norms for acquisition of phonemes and clusters	1 – 2 sounds do not meet I-N norms for acquisition of phonemes and clusters	3 – 4 sounds do not meet I-N norms for acquisition of phonemes and clusters	5 or more sounds do not meet I-N norms for acquisition of phonemes and clusters	
Use B1 OR B2, not both	2. Phonological Processes	No error processes.	One or more of the following error processes occur in 40% or more available opportunities: • gliding of liquids • cluster reductions with /s/ • vowelization of post-vocalic liquids (/r/, /l/)	One or more of the following error processes occur in 40% or more of available opportunities: • weak syllable deletion depalitization of initial singletons • cluster reduction with /l/, /r/, /w/ • fronting of initial velars Presence of Level 1 processes at 20% or greater	One or more of the following error processes occur 40% of more of available opportunities: • initial consonant deletion • final consonant deletion • stopping • depalitization of final singletons Presence of Level 1 and/or 2 processes at 15% or greater	
С	Stimulability (Miccio Probe)	Error sounds are 90% stimulable	Error sounds are 60 – 90% stimulable.	Error sounds are 50 - 60% stimulable.	Error sounds are less than 50% stimulable.	
D	Percentage of Consonants Correct (PCC)	PCC value more than 95%	PCC value of 85 – 95%	PCC value of 50 – 85%	PCC value less than 50%	
					TOTAL POINTS	

LANGUAGE SEVERITY RATING SCALE

A language impairment is defined as the inadequate or inappropriate acquisition, comprehension or expression of language. Students who have Limited English Proficiency (LEP) or those students who are not speakers of Standard American English due to sociocultural dialects are not automatically considered to be students with a speech-language impairment. The presence of a language impairment does not guarantee the child's eligibility for special education.

Evaluation Data⁴

The following measures are appropriate for use in determining the presence of a language impairment:

- 1. language sample
- 2. contextual probes
- 3. structured observation
- 4. classroom work samples (e.g., look at syntax, morphology, organization, vocabulary and spelling in narratives)
- 5. other curriculum academic results (e.g., analysis of SOL assessment results by test item)
- 6. standardized tests
- 7. teacher report, interview, or checklist
- 8. child report, interview, or checklist
- 9. parent report, interview, or checklist

NOTE: Teacher, child, and parent reports, interviews, or checklists are not sufficient evidence by themselves and must be supported with additional data.

Best Practice: Assess with at least one standardized test and two nonstandardized measures of functional language. If a standardized test reveals a deficit, a second measure should be administered to confirm the findings. Language samples and pragmatic assessments must be included as part of the initial assessment.

Spoken Language Comprehension and Production⁵

The severity scale uses the following terms to describe spoken language comprehension and production:

Low comprehension demand: Listening situations that primarily require the student to understand language content and forms acquired at a younger age than the student's current

⁴ Adapted from Connecticut State Department of Education. (1999). <u>Guidelines for Speech and Language</u> Programs. Vol. II: Determining Eligibility for Special Education Speech and Language Services.

5 Adapted from the American Speech-Language-Hearing Association. (2004) K-6 Schools: National Outcomes

Measurement System. Rockville, MD: Author.

chronological age.

High comprehension demand: Listening situations that primarily require the student to understand language content and forms representing more recently acquired structures for the student's chronological age.

Low verbal demand: Verbal initiations and responses that primarily require language content and forms acquired at a younger age than the student's current chronological age.

High verbal demand: Verbal initiations and responses that primarily require language content and forms representing more recently acquired structures for the student's chronological age.

Overall Functional Level

The speech-language pathologist should complete the attached rating scale first, adding the points assigned to each factor. Then the total points should be applied to the Language Severity Rating Scale Overall Functional Level for an overall severity rating.

NOTE: When completing the scale, the rating should be based on the child's performance in his/her preferred mode of communication (e.g., American Sign Language, augmentative/alternative communication). This should be documented in the evaluation report, eligibility minutes, and IEP. On occasion, it may be valuable to complete the rating without the preferred mode of communication to contrast the difference in the child's skills between the preferred mode of communication and standard oral communication.

LANGUAGE SEVERITY RATING SCALE

OVERALL FUNCTIONAL LEVEL

Level 0 (0 – 3 points) No apparent problem	The student's independent language skills are consistently age-appropriate. The student is able to use compensatory strategies when needed.
Level 1 (4 – 6 points) Mild	The student's independent language skills are age appropriate. He/she is successful in participating in most low comprehension and low verbal demand educational activities with minimum support. However, the student's participation in high comprehension and high verbal demand situations may occasionally be limited.
Level 2 (7 – 9 points) Moderate	The student's independent language skills are often age appropriate in low comprehension and low verbal demand educational activities. The student's successful participation is frequently limited in high demand activities unless maximum support is provided to reduce the comprehension and verbal demands.
Level 3 (10 – 12 points) Severe	The student's independent language comprehension and verbal messages are rarely age-appropriate even in low comprehension and low verbal demand educational activities. His/her participation in high comprehension and high demand educational activities is not age appropriate and tends to be extremely limited even with supports.

LANGUAGE SEVERITY RATING SCALE

	Factors	No Apparent Problem (0 pts)	Mild (1 pt)	Moderate (2 pts)	Severe (3 pts)	Points Assigned
A	Description of language in low comprehension and low verbal demand situations	No deficits in receptive, expressive, or pragmatic language	Mild deficit in receptive, expressive, or pragmatic language	Moderate deficit in receptive, expressive, or pragmatic language	Severe deficit in receptive, expressive, or pragmatic language	
В	Description of language in high comprehension and high verbal demand situations	No deficits in receptive, expressive, or pragmatic language	Mild deficit in receptive, expressive, or pragmatic language	Moderate deficit in receptive, expressive, or pragmatic language	Severe deficit in receptive, expressive, or pragmatic language	
С	Standardized Assessment measures (1 or more; standard score assumes mean of 100)	1 standard deviation below mean Standard score at or above 85 17 th %ile or above	1 – 1.5 standard deviations below mean Standard score between 78 and 84 7 th - 16 th %ile	 1.5 - 2 standard deviations below mean Standard score between 70 and 75 - 3rd - 7th %ile 	 2 standard deviations below mean Standard score of 69 or below below 3rd %ile 	
D	Non- standardized assessment (functional analysis)	 May indicate differences from Standard American English Minimal or no impact on pragmatics, semantics, or syntaxmorphological skills 	 May indicate mild deficits in language behavior Minimal impact on pragmatics, semantics, or syntaxmorphological skills 	May indicate moderate deficits in language behavior Moderate impact on pragmatics, semantics, or syntax-morphological skills	 May indicate severe deficits in language behavior Severe impact on pragmatics, semantics, or syntax-morphological skills 	
					TOTAL POINTS	

FLUENCY SEVERITY RATING SCALE

A fluency disorder is primarily characterized by repetitions (sounds, syllables, part words, whole words, phrases), pauses, and prolongations that differ in number and severity from those of normally fluent individuals. The onset usually occurs during the time that language skills are developing, and onset is generally gradual in nature. Secondary characteristics are frequently evident, and these vary in type and severity from individual to individual. The dysfluencies may interfere with intelligibility, social communication, and/or academic and vocational achievement.

Evaluation Data⁶

The following measures are appropriate for use in determining the presence of a fluency impairment:

- 1. speech sample
- 2. total dysfluency index of the types and number of dysfluencies and secondary characteristics obtained in the language sample and a structured reading activity
- 3. contextual probes
- 4. structured observation
- 5. anecdotal records impact of dysfluencies on oral/expressive language tasks
- 6. standardized tests
- 7. teacher report, interview, or checklist
- 8. student report, interview, or checklist
- 9. parent report, interview, or checklist

Note: Teacher, student, and parent reports, interviews, and checklists are not sufficient evidence by themselves and must be supported with additional data.

Best Practice: An assessment for a fluency disorder should include the following components:

- background information: a history of the development of the student's stuttering, family history of stuttering, etc.
- communication abilities: a report of his/her skills in the five parameters of communication stuttering, articulation, voice, language, and hearing.
- oral-peripheral examination: a description of any atypical structures and the functional abilities of the oral mechanism.
- reports, interviews, checklists: completed by the parents, the student, and the teacher.
- structured observation: observation of student's speech and language during oral language activities in the classroom/school environment.

When considering a preschool-age child who is exhibiting dysfluent behavior, research indicates that the chances of success are greater the sooner a problem and its contributing factors are identified. When a preschool-aged child exhibits the following chronic non-fluent behaviors, it is likely the child will benefit from early intervention: the insertion of the schwa, uneven stress

⁶ Adapted from Connecticut State Department of Education. (1999). <u>Guidelines for Speech and Language Programs</u>. Vol. II: <u>Determining Eligibility for Special Education Speech and Language Services</u>.

and rhythm, difficulty initiating and sustaining airflow, body tension and struggle behavior during speech, and the presence of significant predictors such as family history (Runyan, 2004).

Overall Functional Level

The speech-language pathologist should complete the attached rating scale first, adding the points assigned to each factor. Then the total points should be applied to the Fluency Severity Rating Scales Overall Functional Level for an overall severity rating.

Fluency Rating Scale

The fluency rating scale uses the following terminology:

- Description of dysfluency addresses the duration of pauses (from less than 1 second to more than 3 seconds) and number of reiterations per repetition (from less than 4 reiterations per repetition to 6 or more reiterations per repetition)
- Associated non-vocal behaviors means the presence of facial grimaces; visible tension of the head, neck, jaw, and/or shoulders; audible tension, as noted in uneven stress, pitch changes, increased rate, or tension during inhalation or exhalation

For preschool children, the consideration of the adverse effect should be based on the effect of the fluency impairment on the child's developmental skills in play, adaptive/self-help, communication, social-emotional, cognitive, and sensori-motor.

FLUENCY RATING SCALE

OVERALL FUNCTIONAL LEVEL

Level 0 (0 – 3 points) No apparent problem	Dysfluencies are primarily characterized by easy whole word repetitions that comprise less than 4% dysfluent speech behaviors per minute or less than 3 dysfluencies per minute. The student's speech and language skills during educational activities are consistently understood and not distracting to the listener. Student's verbal participation in educational activities is not limited by self-consciousness about listener reaction to his/her speech.			
Level 1 (4 – 6 points) Mild	Dysfluencies are transitory and characterized by easy repetitions, prolongations and some hesitations that comprise 4-5% dysfluent speech behaviors per minute or 3-5 dysfluencies per minute. Blocking, if it occurs, is less than a full second. Tension is noticeable but dysfluencies and tension are not distracting to the listener. Student does not usually avoid speaking situations and participates in oral language activities. Student's verbal participation in educational activities may occasionally be limited by self-consciousness about listener reactions to his/her speech.			
Level 2 (7 – 9 points) Moderate	Dysfluencies are frequent and characterized by repetitions, prolongations, and some hesitations/interjections, and blocking that comprise 6-10% dysfluent speech behaviors per minute or 6-10 dysfluencies per minute. Tension is noticeable, distracting to the listener. Associated behaviors, such as grimacing, and other distracting behaviors are evident during speaking situations. Student is aware of dysfluent speech and avoids some speaking situations and oral language activities. Student's verbal participation in educational activities is impacted by self-consciousness about listener reactions to his/her speech.			
Level 3 (10 - 12 points) Severe	Dysfluencies are habitual and are characterized by repetitions, prolongations, hesitations/interjections, and blocking that lasts 3 or more seconds. Dysfluencies comprise greater than 10% dysfluent speech behaviors per minute or 10 or more dysfluencies per minute. There is evidence of significant vocal tension, some noticeable tremors, and noticeable associated behaviors that are distracting to the listener. Student generally avoids speaking situations and oral language activities. Student's verbal participation in educational activities is significantly impacted by self-consciousness about listener reactions to his/her speech.			

FLUENCY SEVERITY RATING SCALE

	Factors	No Apparent Problem (0 pts)	Mild (1 pt)	Moderate (2 pts)	Severe (3 pts)	Points Assigned
A	Frequency of Dysfluency	Less than 4% vocal dysfluencies per speaking minute OR less than 3 dysfluencies per minute	4% vocal dysfluencies per speaking minute OR 3 – 5 dysfluencies per minute	6 – 10% vocal dysfluencies per speaking minute OR 6 – 10 dysfluencies per minute	10% of more vocal dysfluencies per minute OR 10 or more dysfluencies per minute	
В	Description of Dysfluency	Primarily whole multisyllabic word repetitions Occasional whole-word interjections and phrase/sentence revisions Less than 1 second pauses OR less than 4 reiterations	Transitory dysfluencies in specific speaking situations including repetitions, prolongations, blocks, hesitations or interjections, and vocal tension. 1 second pauses OR 4 reiterations	Frequent dysfluencies in many speaking situations including repetitions, prolongations, blocks in which sounds and airflow are shut off, hesitations or interjections and vocal tension 2 second pauses OR 5 reiterations	Habitual dysfluencies in a majority of speaking situations, including repetitions, prolongations, blocks (long and tense with some noticeable tremors), hesitations or interjections, and vocal tension 3 or more second pauses OR 6 or more reiterations	
С	Associated Non-vocal Behaviors	No associated behaviors	One associated behavior that is noticeable but not distracting	One associated that is noticeable and distracting	Two or more associated behaviors that are noticeable and distracting	
D	Avoidance	Does not avoid speaking situations	Usually does not avoid speaking situations	Does avoid some speaking situations	Generally avoids speaking situations	
					TOTAL POINTS	

VOICE SEVERITY RATING SCALE

A voice impairment is defined as a pitch, loudness or quality condition that calls attention to itself rather than to what the speaker is saying.

Evaluation Data⁷

The following measures are appropriate for use in determining the presence of a voice impairment:

- 1. speech sample
- 2. structured observation
- 3. classroom work results (e.g., oral presentations)
- 4. standardized tests
- 5. teacher report, interview, or checklist
- 6. child report, interview, or checklist
- 7. parent report, interview, or checklist

Note: Teacher, child, and parent reports, interviews, or checklists are not sufficient evidence by themselves and must be supported with additional data.

Best Practice: A comprehensive voice examination should include information obtained from both subjective measures (e.g., perceptual ratings and clinical impressions based on observations and analysis of speech samples) and objective measures (e.g., standardized tests or instrument evaluations). Observations should take place in situations calling for both low and high vocal demand:

- low vocal demand: utterances produced in a relatively quiet environment or short responses that do not require talking over a prolonged period of time.
- high vocal demand: talking in a noisy environment (e.g., in the cafeteria), for a prolonged period of time (e.g., oral presentation or reading aloud), or controlling the voice over a wide pitch range (e.g., singing).

NOTE: Before a child may be found eligible for services for a voice impairment, the child should receive a medical examination from an otolaryngologist (i.e., ear, nose and throat physician), clearing the child for intervention. This is important to ensure the source of the voice impairment is not an organic problem for which therapy is contraindicated. See the Voice Referral Form in Appendix F.

Overall Functional Level

The speech-language pathologist should complete the attached rating scale first, adding the points assigned to each factor. Then the total points should be applied to the Voice Severity Rating Scale Overall Functional Level to determine an overall severity rating.

⁷ Adapted from Connecticut State Department of Education. (1999). <u>Guidelines for Speech and Language Programs</u>. Vol. II: <u>Determining Eligibility for Special Education Speech and Language Services</u>.

VOICE IMPAIRMENT REFERRAL FORM TERMINOLOGY

The following terminology is used on voice referral form.

<u>Abusive Vocal Behaviors</u> – activities such as frequent "throat clearing" or shouting (e.g., cheerleading)

<u>Breathing Pattern</u> – the general contributions of the thoracic, clavicular, and abdominal areas involved in breathing during conversational speech. Look for reliance upon one pattern to the exclusion of the others.

<u>Glottal Attack</u> – the relative (soft vs. hard) onset of vocal fold activity.

<u>Loudness Level</u> - the estimated level of the student's speech during normal conversation in a quiet environment. Persistent whispering or shouting would be positive indications.

<u>Maximum Phonation Time</u> - averaged over three different trials, the maximum amount of time (in seconds) that the student can continuously sustain /a/ (or /i/) on one exhalation.

<u>Muscle Tension</u> –the amount of tension visible in the student's face, neck, and chest areas during normal conversation. Abnormal tension suggested by a stiff posture and/or accompanying strain.

<u>Nasal Resonance</u> - the amount of perceived resonance associated with the production of nasal consonants. An inappropriate degree of hypo – hyper nasality perceived during conversation would be a positive indication. Note: mixed nasal resonance (i.e., both hypo – and hypernasal resonance perceived within the same speaker) may occur.

<u>Oral Resonance</u> – the perceived amount of resonance associated with oral consonants and vowels. Positive indications might include speaking with limited oral openings and reduced intelligibility.

<u>Phonation Breaks</u> – the inappropriate cessation of voicing during speech. A positive indication would be an unintentional and relatively brief period of silence during a normally voiced consonant or a yowel.

<u>Pitch</u> – consider if the vocal pitch is too high, too low, or monotonic for a student's height/weight, age and gender

<u>Pitch Breaks</u> – the cessation of a continuous and appropriate pitch level during speech.

<u>Quality</u> – the overall quality of the student's conversational speech including hoarseness, breathiness, and/or harshness.

<u>s/z ratio</u> – the ratio of the maximum sustained production of /s:/ (in seconds) relative to /z:/ (in seconds). Two trials with the longer production of each sound used to computer the ratio. A ratio greater than 1.4 is an indication of possible laryngeal inefficiency for speech. Report data to the nearest single decimal place.

VOICE RATING SCALE

OVERALL FUNCTIONAL LEVEL

Level 0 (0 – 3 points) No apparent problem	The student's voice consistently sounds normal and does not call attention to itself. The student's ability to participate in educational activities requiring low or high vocal demands is not limited by his/her voice. The student self-monitors vocal production as needed.
Level 1 (4 – 6 points) Mild	The student's voice occasionally sounds normal and is usually distracting to the listener. There is some situational variation. The student's ability to participate in educational activities requiring voice is rarely limited in low vocal demand activities, but occasionally limited in activities with high vocal demand. The student occasionally self-monitors.
Level 2 (7 – 9 points) Moderate	The student's voice is occasionally functional for communication but is consistently distracting to the listener. The student's ability to participate in educational activities requiring voice is usually limited to low vocal demand activities, but consistently limited in high vocal demand activities.
Level 3 (10 – 12 points) Severe	The student's voice is persistently abnormal. He/she may not be able to use his/her voice to communicate.

VOICE SEVERITY RATING SCALE

	Factors	No Apparent Problem (0 pts)	Mild (1 pt)	Moderate (2 pts)	Severe (3 pts)	Points Assigned
A	Voice Quality (hoarse, breathy, no voice)	Normal voice quality	Inconsistent problems; noticeable to the trained listener.	Consistent problems in conversational speech. Noticeable to all listeners.	Persistent problem. Noticeable at all times.	
В	Resonance (hypernasal or hyponasal)	Normal resonance	Inconsistent problems; noticeable to the trained listener.	Consistent problems. Inappropriate for age, gender or culture. Noticeable to all listeners.	Persistent problem. Always inappropriate for age, gender or culture. Noticeable at all times.	
С	Loudness (judged for appropriateness and variability)	Normal loudness	Inconsistent problems; noticeable to the trained listener.	Consistent problems. Inappropriate for age, gender or culture. Noticeable to all listeners.	Persistent problem. Always inappropriate for age, gender or culture. Noticeable at all times.	
D	Pitch (judged for appropriateness for age and gender, and for appropriate variability)	Normal pitch.	Inconsistent problems; noticeable to the trained listener.	Consistent problems. Inappropriate for age, gender or culture. Noticeable to all listeners.	Persistent problem. Always inappropriate for age, gender or culture. Noticeable at all times.	
					TOTAL POINTS	